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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/291,316	04/14/1999	HYUN-SEOK LEE	678-258(P871	1934

7590 06/21/2002

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EXAMINER

ABELSON, RONALD B

ART UNIT PAPER NUMBER

2663

DATE MAILED: 06/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Me

Office Action Summary

Application No.

09/291,316

Applicant(s)

LEE ET AL.

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-21 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 9 and 11-13 is/are rejected.
- 7) ☒ Claim(s) 4, 7, 8, 10, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-6, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art, and further in view of Gitlin (5,856,971).

Regarding claim 1, the applicant's admitted prior art teaches a method for transmitting user data in a mobile communications system having at least one state transition (fig. 1, pg. 1 lines 10-11), at least one state transition including transitioning from an active state where user data is transmitted via a dedicated channel ^(pg 4 lines 19-20) to a control hold state when user data is not generated for a predefined time in the active state ^(fig. 1 box 140, 130, pg. 4 line 19 - pg. 5 line 3) to transmit only control information via a dedicated control channel (releasing the dedicated traffic channel, pg. 4 line 19 - pg. 5 line 3). In addition, the prior art teaches releasing the dedicated control channel and transitioning to a suspended

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state when the user data to be transmitted is not generated for a second predefined time in the control hold state (fig. 1 box 130, 150, pg. 5 lines 4 - 13); determining a parameter value specifying an attribute of the generated user data and comparing the parameter value with the ^{a predefined reference} ~~parameter~~ value when the user data to be transmitted is generated in the suspended state ($T_{\text{suspended}}$, pg. 5 line 14 - pg. 6 line 1); and transmitting data when the parameter value is lower than the predefined reference (pg. 5 line 14 - pg. 6 line 1). Note, first the state is transitioned to 140, then the data is transmitted.

However, the applicant's admitted prior art does not teach transmitting over a common channel once control resides in the suspended state / idle mode.

Gitlin teaches transmitting over a common channel once control resides in the suspended state / idle mode (fig. 5 box 501, 507, 511, 513, col. 5 line 59 - col. 6 line 29).

Therefore it would have been obvious to one of ordinary skill in the art, having both applicant's admitted prior art and Gitlin before him/her and with the teachings [a] as shown by applicant's admitted prior art, a mobile communications system having an active, control hold, suspended, and dormant state, and [b] as shown by Gitlin, transmitting over a common channel once control resides in the suspended state / idle mode, to be

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motivated to modify the system of applicant's admitted prior art by being able to transmit data over a common channel once control resides in the suspended state. This modification can be performed in software. This would improve the system to allow for the case of bursty data where multiple codes are needed and the number of codes required is variable (Gitlin: col. 6 lines 8 - 21).

Regarding claim 2, transitioning to the active state to transmit data (spec: pg. 5 lines 4 - 13).

Regarding claim 3, if no data is generated within $T_{\text{suspended}}$, then the length of the user data is 0.

Regarding claim 5, the suspended state is a slotted substrate (spec: fig. 2 box 156).

Regarding claim 6, the suspended state is a virtual traffic substrate (spec: fig. 2 box 153).

Regarding claim 9, common channel is an access channel (Gitlin: fig. 5 box 501, col. 5 line 59 - col. 6 line 7).

3. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of the applicant's admitted prior art and Gitlin as applied to claim 1 above, and further in view of Rezaiifar (US 6,377,809).

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Regarding claim 11, the combination of the applicant's admitted prior art and Gitlin is silent on receiving user data.

Rezaiifar teaches receiving user data via a common channel (fig. 9A, channel assignment message, col. 17 lines 18 - 40). Note, the examiner equates the channel assignment message with the dedicated traffic channel in the applicant's specification (col. 3 lines 9 - 17), which the applicant refers to as a common logical channel.

It would be obvious to one skilled in the art to store user data that is received in the suspended state. The system described by the combination of the applicant's admitted prior art and Gitlin is capable of receiving packet data (spec: pg. 1 lines 13 - 21). The receiver stores packet data, such as text, so that it may be later processed.

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of the applicant's admitted prior art and Gitlin and Rezaiifar before him/her and with the teachings [a] as shown by the combination of the applicant's admitted prior art and Gitlin, a mobile communications system having an active, control hold, suspended, and dormant state, and [b] as shown by Rezaiifar, receiving user data via a common channel, to be motivated to modify the system of the combination of the applicant's admitted prior art and

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Gitlin by incorporating the receiver of Rezaiifar (fig. 2 box 6). This would improve the system by allowing data to be received, stored and later transmitted.

Regarding claim 12, the suspended state is a slotted substrate (spec: fig. 2 box 156).

Regarding claim 13, the suspended state is a virtual traffic substrate (spec: fig. 2 box 153).

Allowable Subject Matter

4. Claims 16-21 are allowed.

5. Claims 4, 7, 8, 10, 14, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 4, nothing in the prior art teaches or fairly suggests the parameter value is a generation frequency of the user data in combination with the other limitations of the claim.

Regarding claims 7, 8, 14, and 15, nothing in the prior art teaches or fairly suggests the suspended state consisting of a

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burst substrate in combination with the other limitations of the claims.

Regarding claim 10, nothing in the prior art teaches or fairly suggests the common channel is a paging channel in combination with the other limitations of the claim.

Regarding claims 16 and 18, nothing in the prior art teaches or fairly suggests transmitting user data while in the second suspended state in combination with the other limitations of the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

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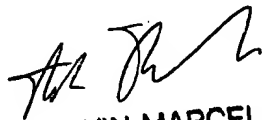
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

RA

Ronald Abelson
Examiner
Art Unit 2663

RA

June 17, 2002


MELVIN MARCELO
PRIMARY EXAMINER

Attachment for PTO-948 (Rev. 03/01, or earlier)
6/18/01

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes **incorporated** therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.